Bureau of Environmental Services DRAFT FY2020-21 Program Offer Information for the 1/7/2020 Portland Utility Board Meeting

The following pages include current drafts-in-progress of the five FY2020-21 Program Offer narratives specifically requested by PUB:

- Capital Program Management and Controls
- Communication
- Asset Systems Management
- Environmental Compliance
- Employee Development

We have also included (as additional info/reference) two Program Offer narratives that were identified as potential areas of interest during a prior PUB discussion, but did not make the "Top 5" list:

- Watershed Management
- Treatment

A few important notes about the attached information:

- This draft information was assembled as of December 31, 2019. Some budget decisions and documentation are still being completed in during the month of January. Therefore, all information herein is subject to change prior to submission of the Requested Budget on January 29, 2020.
- In particular, BES (via the Equity Managers) is still completing review and update of the "Equity" sections of the Program Narratives during the week of January 6.
- This draft information was pulled directly from the City Budget software ("BFM") and the formatting reflects output from that software program. BES has limited control of formatting details (font, spacing, page breaks, margins, etc).
- Note that within the "Program Budget" section of each Program Offer, narratives are from last year and <u>have not yet been updated</u>. Prior year numbers are included for reference, but <u>FY2020-21 numbers are incomplete</u> as Personnel costs and some budgeted items (for example, interagency costs) are not yet completely loaded into the City software system. Entry of some of this information is dependent upon other bureaus. BES Financial Planning will be completing technical reviews and QA/QC during the month of January.
- Near-final drafts of the bureau's 21 remaining Program Offers are expected to be completed the week of January 6.

BES staff look forward to discussing this information with PUB at the January 7, 2020 meeting.

Capital Program Management and Controls

Program Description & Goals

The Capital Program Management and Controls Program was formerly in the Engineering Services workgroup. It was reorganized and expanded in 2019 into the new BES Project Management Office (PMO), which reports directly to the BES Director. The PMO facilitates effective and efficient delivery of the Bureau's Capital Improvement Program (CIP). This program manages the budget development process for the capital program, provides overall project management, administers project controls processes, tracks project delivery performance and recommends long-range capital investment strategies that align with the Bureau's Strategic Plan and ratepayer expectations. As the program responsible for scheduling, monitoring and managing projects in the CIP, the PMO directly or indirectly impacts all Bureau performance measures related to capital project delivery, including measures for combined and sanitary sewer overflows and maintenance costs at the wastewater treatment plants. Efficiency of construction management costs is indirectly impacted by the PMO because of support and procedures provided for better scoping, scheduling, and cost estimating projects in the early phases of design, which results in fewer changes during construction. Amount of pipe repaired or replaced is impacted by both the CIP project prioritization process, which balances pipe rehabilitation project needs with other project types and priorities, and project delivery processes.

Measure Title	PM 2017-18 Actuals	PM 2018-19 Actuals	PM 2019-20 Target	PM 2020-21 Target	Strategic Target
Construction management costs as a percentage of total construction costs	14%	10%	12%	0	0
Linear feet of sanitary and combined sewer pipe repaired or replaced to improve condition and capacity	93,006	107,751	57,000	0	0

Explanation of Services

The PMO is comprised of four work units that provide the following services:
• Capital budget development and monitoring,
• Capital project and program controls,
• Capital project management,
• Capital project quality (QA/QC),
• Contract administration for on-call PTE support contracts for capital projects, and
• Overall Program/Project management for the Columbia Boulevard Wastewater Treatment Plant Secondary Treatment Expansion Program (STEP).

The PMO has overall responsibility for developing and monitoring the Bureau's CIP of more than $150 million annually. The program is responsible for balancing the capital budget across a variety of project types and risk drivers and developing a multi-year capital program that is within the Bureau's financial and operational capacity. The projects in the CIP originate from information identified via the Asset Systems Management Program and based upon needs identified by operating programs throughout the Bureau.

The PMO also includes the function of overall project management, where project managers responsible for capital project delivery manage matrixed project teams of staff from other BES programs and workgroups. For example, Engineering design is performed by the Design Services Program, project construction is managed by the Construction Services Program, and public outreach and involvement is performed by the Communication Program. Other functions in the PMO include the administration of project and program controls, which includes scope, schedule and cost change control and regular monitoring of project status for the more than 200 active projects in the CIP; ensuring project quality; administering the bureau's project management software (e-Builder) and providing best practices documentation and training support.

The PMO is currently leading the development of new capital project delivery processes and procedures, with the goal of improving efficiency and effectiveness of capital project delivery and increasing overall annual project throughput.

Equity Impacts

Equity considerations are built into capital project prioritization through the system planning processes that advance projects to the CIP. For example, in the planning process for both the combined sewer system and the stormwater system, projects are ranked and prioritized against all other needs within that system based on multiple factors of risk, including equity impacts on vulnerable communities. When priority project proposals from each system plan or regulatory driver reach the PMO through the annual CIP development process, they are evaluated against each other with scoring that includes impacts to human health and safety, business customers and residential customers, and impacts to public infrastructure such as streets. The ongoing BES organizational transition work will include efforts to align equity considerations across the system planning, portfolio management, and CIP prioritization processes. Equity during delivery of individual projects, including involvement of diverse communities in project design and consideration of impacts on vulnerable communities due to construction, are a shared responsibility between the project manager, public involvement staff, and other project team members.
The PMO supports the BES Equity Plan's goal around equity in contracting (purchasing) through the administration of more than 30 on-call Professional Technical Expert (PTE) contracts for project support services such as civil and structural engineering, permitting, and water quality expertise. PMO staff monitor and encourage D/M/W/ESB firm utilization, and work to support D/M/W/ESB firms through direct contracting whenever possible as a first preference (per established City thresholds). Additionally, PMO staff provide one-on-one support to D/M/W/ESB firms around how to work with the City's contracting processes and BES project delivery processes.

Changes to Program

Collectively, reinvestment in sewer and stormwater infrastructure was deprioritized from 1991-2011 as the Bureau prioritized completion of the $1.4 billion Combined Sewer Overflow project. Within the given resource constraints, the Bureau has been challenged in recent years to ensure that asset investment is optimized to prevent service interruptions and address the backlog of aging collection system and treatment plant assets, while also addressing new regulatory requirements. Beginning in FY 2017-18, the Bureau set a target to significantly increase CIP output to ensure sustainable reinvestment in infrastructure over the long term. The FY2020-21 CIP is $1xxM, a xx % (increase) from FY19-20 when excluding the bureau's contribution to the Portland Building reconstruction. Significant increases to the annual CIP are expected in the next three fiscal years, as design and construction of the regulatory-mandated Secondary Treatment Expansion Project ramps up at the Columbia Boulevard Treatment Plant (CBWTP), and programmatic work for pump station improvements and other wastewater treatment projects increases.

The increased capital delivery target is straining a workforce that already relies on consultants and contracted staff to meet project planning, design and construction needs. In FY2018-19, reorganization to the PMO, creation of six new project manager positions (from existing bureau resources), and delivery process improvements initiated the long-term strategy to address this challenge. Additional project management and support positions are expected to be incrementally transferred into the PMO through further internal BES reorganization such that the majority of the 200+ active CIP projects become managed by the PMO in the coming years. However, additional requests for budgeted positions for project management, design engineering, project controls and project support are likely in the coming years to support successful delivery of the capital program.

The FY2020-21 requested budget includes $225,000 for consultant support for these improvements and professional project management training, which is a continuation of efforts begun in FY19-20. Consultant resources are critical for the initial facilitation, documentation, and training on new processes and procedures, but these costs are expected to decline over the next three years as new processes become institutionalized and staff are adequately trained.

Two new FTE are requested in the FY2020-21 budget for the PMO – both of which would replace positions that are currently filled via temporary appointments. The first new position is a Manager for the Project Management division in the PMO. Currently in the initial phase, this division manages 20 capital projects valued at roughly $100M. This division is expected to continue to take on more projects, ultimately managing the majority of BES CIP projects as project staffing is added into the PMO. This Manager and division are also responsible for development and implementation of the new BES project delivery process. The permanent position will ultimately oversee a large division divided into teams focusing on different project types (likely corresponding with new yet-to-be-identified BES project portfolios). This is a key position supporting improvement of inter-bureau partnerships and coordination, integrated project teams, and linking integrated planning to capital project objectives. The second new FTE is an Analyst to support business operations of the new and growing workgroup. A permanent position is needed as a long-term solution to support the business operations needs of this growing workgroup (currently 17 FTE, projected to grow significantly over the next 3-5 years). Work includes managing the operating budget and operating plan, coordinating overall staffing planning and personnel actions, supporting employee training and onboarding, contract management, communication efforts, and coordination with other BES workgroups. The position also manages special projects and strategic coordination efforts that span the PMO's divisions and sections, helping to bridge the distinct missions and functions within the group.

Program Budget

	FY 2017-18 Actuals	2018-19 Actuals	2019-20 Revised	2020-21 Requested with DP
Bureau Expense				
Capital Outlay	58,004,524	78,009,279	92,494,455	170,782,000
External Materials and Services	14,794,924	23,109,584	20,681,847	747,845
Internal Materials and Services	15,645,006	17,611,054	7,659,018	107,413
Personnel	12,459,377	13,449,107	20,924,355	0
Sum:	**100,903,831**	**132,179,024**	**141,759,675**	**171,637,258**
FTE	133.06	13.95	0	0

Resources: Resources for this program come from ratepayer fees and charges for sewer and stormwater services.

Expenses: The primary expense for this program is the Bureau's Capital Improvement Program (the "CIP"). Personnel are allocated from other programs to support the CIP. External Materials and Services costs include contract staff, outside design and construction consultants, and other services necessary to develop and complete capital projects. Internal Services reflects costs of partner bureaus that assist in the implementation of the CIP and include PBOT, Parks, and the Water Bureau.

Staffing: 9 positions support this program with an additional 130.4 positions allocated from other programs to support the capital improvement portion of this program. Positions include Analysts (6), a Coordinator III, an Engineering Technician II, and a Manager II.

Assets and Liabilities: This program supports Bureau-wide assets of $13.5 billion.

Program Information

Bureau: Bureau of Environmental Services

Website: https://www.portlandoregon.gov/bes/

Program Contact: Ken Bartocci

Contact Phone (503) 823-6022

Communications

Program Description & Goals

The Communications Program employs a variety of communication tools and methods to promote awareness of and involvement in the work of the Bureau. The program encourages public interest and engagement with the Bureau, to promote behaviors and activities that support stewardship of the public sewer and stormwater systems. The Communications Program is strongly aligned to the strategic goal area of Community Relationships, which aims to build strong community relationships and be a trusted service provider.

Measure Title	PM 2017-18 Actuals	PM 2018-19 Actuals	PM 2019-20 Target	PM 2020-21 Target	Strategic Target
Number of bureau education programs delivered	431	498	400	400	400

Explanation of Services

The Communications Program manages the Bureau's internal and external communications, media relations, social media, graphic design, community outreach and science education programs. The team provides services directly to BES employees, assisting them in communicating with and engaging their target audiences to achieve Bureau, City and community goals. Activities include developing and implementing strategic communications plans, messages and communications content, as well as advising on appropriate methods of distributing information to BES and City employees, City Council and community audiences.

Frequent and open communication with the public has many benefits:

- Increased transparency about how BES uses ratepayer funding to build and maintain sewer and stormwater infrastructure and protect public health and the environment
- Increased public awareness of issues facing the Bureau and the sewer and stormwater system
- Better relationships and partnerships with the public
- More awareness of how the public can work with BES to protect sewer infrastructure and the environment (such as not dumping grease down the drain, reducing pesticide use on lawns, and reporting illegal dumping, pollution and spills)
- Increased support for Bureau efforts
- Provision of information about Bureau projects and programs directly to the public, so that people do not have to rely solely on the media and social media to learn about Bureau activities

Equity Impacts

The Communications Program works directly with Portland's communities of color and people with disabilities to ensure and improve access to BES services. Funding for the BES website re-design (via PTE contract) is improving ADA accessibility and overall customer navigability for our residential and commercial customers. This contract was awarded to a M/W/ESB service provider. This project addresses strategic initiatives related to communication improvements, providing equitable (ADA) access and making a community-oriented website where services are easy to find, access, and easy to understand in plain English so that is easy to translate for all customers. This contract supports the bureau's achievement of the Equitable Service Delivery and Business Practices goal outlined in the Bureau's 2016-2021 Equity Plan.

Changes to Program

Changes in the media landscape, community expectations regarding access to information and potential changes in regulatory requirements necessitate ongoing review of communications strategies and tactics. In addition, supporting implementation of the Strategic Plan and the upcoming organizational transition requires a significant increase in the amount and importance of internal communications.

Portland's demographics are changing, and consequently the Bureau's engagement and outreach efforts need to be responsive to the needs of a wide range of communities. This has resulted in a significant increase in the need for enhanced cultural responsiveness, language resources and culturally specific outreach and engagement.

The one significant proposed change to the Communications Program in FY 2020-2021 is addition of a full-time Coordinator III position to support strategic communications Bureau-wide. Anticipated areas for initial support would include organizational transition implementation, customer financial assistance and incentive programs, integrated planning efforts, and regulatory requirements. The position would also be responsible for management of the bureau's social media channels, development of quarterly bill inserts, and production of the annual RiverViews newsletter.

Program Budget

	FY 2017-18 Actuals	2018-19 Actuals	2019-20 Revised	2020-21 Requested with DP
Bureau Expense				
Capital Outlay	0	24,781	0	77,000
External Materials and Services	160,043	145,617	373,571	373,571
Internal Materials and Services	78,932	71,970	34,745	14,482
Personnel	1,054,441	1,165,737	1,018,081	0
Sum:	**1,293,416**	**1,408,106**	**1,426,397**	**465,053**
FTE	8.1	12.6	0	0

Resources: Resources for this program come from ratepayer fees and charges for sewer and stormwater services.

Expenses: Expenses for this program include personnel and funding for public service, awareness and outreach campaigns. Internal service costs are primarily attributable to printing and distribution of materials.

Staffing: 13 positions support this program with approximately 5.45 FTE allocated to capital projects within the Project Management and Controls Program Area for public outreach on construction projects. Positions include a Public Information Manager and Officer, Coordinators (10), and a Graphic Designer.

Assets and Liabilities: This program supports Bureau-wide assets of $13.5 billion.

Program Information

Bureau:	Bureau of Environmental Services	**Program Contact:**	Ken Bartocci
Website:	https://www.portlandoregon.gov/bes/	**Contact Phone**	(503) 823-6022

Asset Systems Management

Program Description & Goals

The Asset Systems Management (ASM) Program (within the Engineering Services Group) identifies and appropriately prioritizes BES asset system improvements and investment strategies needed to continue to maintain and improve the service levels and reliability of wastewater and stormwater system infrastructure, including balancing the need to meet regulatory requirements. The ASM Program identifies, clarifies and communicates the levels of service related to physical system assets and the related decision-making processes that are needed to put those assets into service for customers. This program directly impacts the performance measures listed below by providing the system planning and analysis (i.e., hydraulic and hydrologic modeling) that informs and prioritizes system investments to reduce the risk of sewer pipe failure, capacity-related flooding and combined and sanitary sewer overflows. The project-level modeling and analysis that the ASM Program provides also directly impacts performance measures by informing appropriate project design.

Measure Title	PM 2017-18 Actuals	PM 2018-19 Actuals	PM 2019-20 Target	PM 2020-21 Target	Strategic Target
Number of sanitary sewer overflows	168	187	135	135	0
Number of stormwater flooding events due to system capacity	60	49	100	0	0
Number of combined sewer overflow events	3	1	4	4	0
Linear feet of sanitary and combined sewer pipe repaired or replaced to improve condition and capacity	93,006	107,751	57,000	0	0

Explanation of Services

The Asset Systems Management Program provides analysis, interpretation and in-depth, functional understanding of how BES system assets interact with each other. This is done at all evaluation scales, from citywide down to the local project level. This function is necessary to identify and prioritize BES system improvements and asset investment strategies, to (1) maintain and improve the service and reliability of the City's wastewater and stormwater infrastructure as cost-effectively as possible, and (2) protect public health and safety systemwide. ASM is the only program in the Bureau that performs this essential function. ASM is sometimes requested to support and assist other work groups by collaborating on new system-related initiatives or through technical review of work. This work depends on institutional knowledge and leveraging an intimate understanding by ASM staff of how the BES asset systems function. Developing these skills is an investment in time and mentorship of staff. This knowledge is gained through experience and work performed over years by ASM staff on highly technical, multi-faceted wastewater and stormwater infrastructure system and process analyses.

Equity Impacts

The ASM Program is responsible for incorporating equity considerations into the risk evaluation and project prioritization processes for the combined and sanitary sewer system assets. The current risk process uses U.S. Census information on vulnerable communities. The ASM Program is working with other Bureau work groups to expand how we incorporate equity into the broader system planning space, such as by establishing targets for levels of service. Integration of hydraulic and hydrologic modeling software with the City GIS system and City-collected data developed to help understand the conditions and challenges facing communities with disparities could be implemented to improve planning efforts and help better understand equity impacts BES projects have on vulnerable communities. In addition, this program continues to utilize M/W/ESB firms for contracting professional services when needed.

Changes to Program

The demand for ASM resources has doubled since FY 2015-16, specifically in the areas of spatial analysis and modeling analysis, alongside major system planning efforts initiated over the past two fiscal years. As the limited-term consultant services to support the strategic planning efforts come to an end by FY 2020-21, the expectations and demand on internal staff resources will increase. Although limited-term contracts have helped initiate the strategic planning efforts, the internal staffing resources necessary to implement and sustain the improvements have not advanced. The increased workload burden on staff has demonstrably resulted in increased overtime and observed instances of sick time.

For FY2020-21, the ASM program requests a lead Engineer – Civil (Modeler) and support/junior Senior Engineering Associate – Civil (Modeler) to help manage current and future system planning workloads anticipated when the Bureau structurally re-organizes to emphasize integrated planning and project delivery. ASM engineers are currently tasked with supporting the following long-term/ continuous planning efforts: Continuous Collection System Plan; continued efforts on Resiliency Planning; implementation of the Pump Station System Plan; Dunthorpe-Riverdale Sanitary Facility Plan; updates to the Sewer Extension Master Plan; and increasing support for the Stormwater System Plan. Existing FTE, Professional, Technical and Expert services (PTE) and on-call resources are inadequate to support the entirety of this system planning work. In addition to being more cost-effective (see below), hiring permanent City staff has the additional long-term benefit of accruing knowledge through experience, and supporting Bureau goals related to workforce development.

Contract staff have been (and will continue to be) utilized to help perform analysis work, and to level peak workload and perform one-off analyses or simple requests that would otherwise disrupt ASM staff workflow on more complex analyses. Contract staff are also used to help initiate new project initiatives on a limited contract term (e.g., Resiliency Master Plan). Historically, contracting more of the strategic planning and complex system analysis work has resulted in reduced product quality at a higher cost to the City. Adding in-house FTEs will create more productive and cost-effective outputs over the long-term and allow the City to retain the knowledge invested in FTEs. An alternative is to fill some of the need with (temporary) contract engineering staff, but at a higher cost and reduced benefit.

The FY 2020-21 budget also includes requests to increase consultant support:
• $250,000 for consultant support for asset management analysis work, which adjusts the projection of expenditures across the multi-year Continuous Collection System Plan update as a result of delays in contracting that occurred in FY 2018-19 along with delays in the contract starting due to an extended procurement process. The total cost of the multi-year project (anticipated for completion in FY 2021-22) remains unchanged at $1.5 million.
• $150,000 in one-time funding is being requested to evaluate the current controls system for wastewater treatment plants and pump stations and prioritize recommendations for new technology and reinvestment. This work will be led by the Engineering Treatment and pumping Systems Division. The communication and controls system has grown considerably over the past 20 years without a plan for reinvestment. The communication and controls system is the backbone system of operation for the two wastewater treatment plants and 98 pump stations. An inefficient system produces unnecessary costs and risks operational failures, which can lead to public health risks and permit violations. There is a need to plan for a resilient system that meets the goals of reliability centered operations and maintenance (RCOM). There is an opportunity for efficiency and cost saving improvements, but a comprehensive assessment needs to be completed.

Program Budget

	FY 2017-18 Actuals	2018-19 Actuals	2019-20 Revised	2020-21 Requested with DP
Bureau Expense				
Capital Outlay	2,533,092	-1,418,138	0	0
External Materials and Services	704,726	2,125,525	660,445	1,343,945
Internal Materials and Services	-9,858,904	-11,641,409	332,840	133,293
Personnel	1,601,754	1,582,362	2,194,680	81,200
Sum:	**-5,019,331**	**-9,351,660**	**3,187,965**	**1,558,438**
FTE	12.05	24	0.5	0

Resources: Resources for this program come from ratepayer fees and charges for sewer and stormwater services.

Expenses: Primary expenses for this program are personnel, outside consultant costs for system plans (Resiliency, Pump Station, and Continuous Collection Master Plans), and specialty engineering software. Additionally, this program supports costs of laboratory services and field operations for sampling and monitoring from the Water Pollution Control Lab.

Actual Internal Materials and Services for FY 2016-17 and FY 2017-18 reflect an accounting entry that reduces operating expenses and allocates the expenses to capital projects representing the bureau overhead allocations.

Staffing: 25 positions support this program with approximately 11.5 FTE allocated to the Capital Program Management and Controls Program for capital improvement projects. Positions include Engineers (23) and GIS Technicians (2).

Assets and Liabilities: This program supports Bureau-wide assets of $13.5 billion.

Program Information

Bureau: Bureau of Environmental Services

Website: https://www.portlandoregon.gov/bes/

Program Contact: Ken Bartocci

Contact Phone (503) 823-6022

Environmental Compliance

Program Description & Goals

The Environmental Compliance Program manages, interprets and implements City-wide environmental permits and associated state and federal regulations. Through compliance inspections, investigations, technical analyses, data collection and management, program evaluations and policy development, this program helps protect the City's storm and sanitary assets, watershed health and local water quality.

Measure Title	PM 2017-18 Actuals	PM 2018-19 Actuals	PM 2019-20 Target	PM 2020-21 Target	Strategic Target
Percentage of industrial enforcement tests in full compliance	99%	99%	99%	99%	0
Average resources spent in site investigations and cleanup, per site investigated or remediated	$10,629	$10,965	$10,000	0	0

Explanation of Services

The Environmental Compliance Program manages Citywide environmental programs and permits and performs the associated activities of developing codes and rules, permitting private dischargers, investigating complaints and illicit discharges, inspecting commercial and industrial facilities, establishing and implementing user charges and enforcing codes and rules.

The Environmental Compliance Program manages the following permits and environmental programs:

• Columbia Boulevard and Tryon Creek Wastewater Treatment Plant National Pollutant Discharge Elimination System (NPDES) Permits. These permits regulate the discharge of total suspended solids (TSS), biochemical oxygen demand (BOD) and E. coli to the Columbia and Willamette rivers.

• Phase I NPDES Municipal Separated Storm Sewer System (MS4) Permit. This permit is intended to reduce or eliminate stormwater pollution by directing the operation and management of drainage and roadway infrastructure, parks and natural areas, maintenance facilities and other features of the built and natural environments. The permit also influences construction development standards.

• Underground Injection Control Water Pollution Control Facility (UIC-WPCF) Permit. The UIC-WPCF permit protects beneficial uses of groundwater by reducing or preventing pollutants from public rights-of-way from entering approximately 9,000 City-owned injection wells, which manage stormwater throughout the City.

• Total Maximum Daily Load (TMDL) Program, which ensures that City discharges of certain pollutants (e.g., temperature, bacteria, mercury) to local rivers and streams do not exceed amounts allocated by the Oregon Department of Environmental Quality (DEQ). (DEQ has determined the maximum combined load from point and nonpoint sources that still meets water quality standards).

• Air Contaminant Discharge Permit (ACDP). This permit requires the Bureau to track and report sources of air contaminants. This was recently updated to include air toxics as part of Cleaner Air Oregon requirements.

• Solid waste permit for the management of biosolids at CBWTP. This is a permit to manage and close the Triangle Lake Monofill.

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• Industrial Stormwater 1200Z permit at CBWTP. This is a permit to manage stormwater discharges from the CBWTP campus to the Columbia Slough.

• Regulation of industrial and commercial facilities through permitting, inspections, monitoring and enforcement of site practices, discharges to storm and sanitary systems and direct discharges to surface waters. This includes the Pretreatment and Industrial Stormwater programs.

• Regulation of nonpermitted industrial, commercial and residential facilities through complaint response, investigations, inspections, monitoring and enforcement of site practices, discharges to storm and sanitary systems and direct discharges to surface waters. This includes the Fats, Oils, and Grease (FOG), Maintenance Inspection (MIP), and Spill Prevention & Citizen Response (SPCR) programs.

• Oversight and assessment of monitored and class average Extra Strength sewer charges for the discharge of high-strength waste from commercial and industrial facilities.

• On-call environmental engineering, investigation, characterization and remediation services provided by Coordinated Site Analysis (managed under the Environmental Investigations and Monitoring Program).

• Technical and financial support for property owners, developers, community organizations, and neighbors who are interested in cleaning up brownfields and recovering neighborhood land. These services are provided by the Portland Brownfield Program.

Equity Impacts

The Environmental Compliance Program has a direct, mandated responsibility to ensure that the environmental programs and permits it manages result in positive equitable outcomes for all communities. These programs provide significant benefits to underrepresented communities, particularly those living near industrial facilities and those relying on direct contact with surface water (e.g., through subsistence fishing).

The Portland Brownfield Program was created directly in response to an environmental justice initiative at the U.S. Environmental Protection Agency (EPA). From the Portland Brownfield Program's inception, a central goal has been to address the environmental burden that brownfields create in neighborhoods. According to a recent Metro report, brownfields are three times more likely to exist in underserved communities. The Portland Brownfield Program focuses on neighborhood brownfields: smaller commercial sites, like former gas stations and dry cleaners, that are often found close to homes, schools and businesses. The program provides financial assistance to clean up sites that will provide benefit to existing community. Project partners that have received assistance from the Portland Brownfield Program include Verde, Black United Fund, Oregon Food Bank, Hacienda CDC, Dharma Rain Zen Center, Albina Youth Opportunity School, Community Energy Project, Proud Ground and REACH CDC.

The Coordinated Site Analysis (CSA) team supports the equitable provision of utilities and watershed improvements, as well as remediation of contaminated areas that have the potential to pose unacceptable risk to human health and the environment.

Changes to Program

Environmental Compliance Program responsibilities and priorities depend greatly on changes to regulations at the federal, state and local level; new and reissued permits; and new permit conditions. Program expectations can change based on newly emerging pollutants and industries, changes to the City's sewer system and changes to practices and regulations that affect industrial and commercial facilities. More stringent state and federal requirements have led to a greater need for staffing and professional resources because City-held permits are more complex and

for staffing and professional resources because City-held permits are more complex and prescriptive and have more stringent discharge standards. It is critical that the Bureau develop a more standardized and robust data management system to support compliance.

The Portland Brownfield Program uses U.S. Environmental Protection Agency (EPA) funding for many projects; however, EPA funding has become more competitive and less stable in the past year. At the state level, new and proposed legislation has created opportunities for new types of brownfield incentives in Oregon.

With the CBWTP on the 2019 NPDES permit issuance list, the Environmental Compliance Program has needed to carry out additional monitoring, develop more reports and submit more data and reports. DEQ air toxics regulations from 2018 will require more scrutiny of our system, more reporting to DEQ and potentially additional air control upgrades at CBWTP. The 1200Z Industrial Stormwater permit was issued in 2018 with additional monitoring requirements that affect compliance at the CBWTP and the Environmental Compliance Program's oversight of 500 regulated industrial facilities.

The Environmental Compliance Program has adapted to meet these new demands. Staff are actively engaged in legislative efforts to sustain and grow brownfield resources at both the state and federal levels, and the program is implementing process improvements to facilitate anticipated increases in BES capital improvement projects, utility coordination with the Bureau of Transportation and Water Bureau and support of broader City initiatives. The program is moving to a new data management system, which has been under development for approximately five years. This will greatly improve program efficiencies (e.g., inspections, enforcement, data management and cross-program activities). Additionally, the program is cross-training staff in multiple program areas to improve multimedia industrial inspections (e.g., Industrial Stormwater staff inspecting MIP facilities when possible), and it is developing program audits to evaluate the City's compliance with permit requirements.

Primary budget additions requested in FY2020-21 include 5 new FTE and ongoing funding for on-call contracting:

• A Technician I – Stormwater to support the Columbia Corridor Stormwater Program (CCSP), which was created to meet the City's regulatory requirements under the Record of Decision for Slough Sediment and associated IGA and Columbia Slough Watershed Action Plan. This position will perform a desktop analysis of each basin to determine which facilities contribute sediment to the right-of-way. For each facility, they will build a site drainage file and assist with the inspection of and issuance of any associated enforcement actions and permit coverage requirements as appropriate. It is expected that over 1,000 facilities will be inspected as part of this effort.

• A Coordinator I - Pretreatment to provide data entry and outreach support to the sub-meter program, which ensures qualifying businesses are properly billed for sanitary sewer charges. The Coordinator I position will work with customers to ensure sub-meter reads are submitted and entered, collaborate with Water Bureau, help resolve customer issues, assist with audits to ensure accuracy of sub-meter data, create and maintain a submeter webpage, and conduct other focused outreach activities, increasing participation of businesses in marginalized communities.

• An Environmental Program Coordinator which will be shared across three programs (Wastewater Treatment Plant Compliance, MS4 and Brownfields) to align complementary work in regulatory compliance and equitable community engagement. These three programs have been relying on seasonal positions to fulfil essential duties and are operating at reduced capacity due to staff limitations and turnover. The position will provide coordinated communication and involvement, for residential and commercial pollutant source control initiatives and with historically marginalized communities for brownfield assessment. The activities are required by both NPDES permits and EPA brownfield grants. Work will include establishment and maintenance of pollution prevention programs, including outreach and education activities intended to reduce contributions of pollutants

programs, including outreach and education activities intended to reduce contributions of pollutants entering the sanitary and stormwater and systems. Work will help the City achieve increasingly stringent water quality standards and reduce known toxics and emerging contaminants, such as pharmaceuticals, from entering our systems and being discharged to surface waterways, threatening public and watershed health.

• A Toxics Regulatory Coordinator to develop Toxics Reduction Plans for Mercury, PFAS, phthalates, and others as necessary. Recent state and federal regulations regarding toxics monitoring, management, and source controls are driving the City's wastewater and stormwater permit requirements. NPDES permitting will require greater oversight and removal of toxics and emerging contaminants: pharmaceuticals, phthalates, mercury, and PFAS. The Willamette Mercury TMDL calls for a 75% reduction of Mercury from stormwater and 10% from wastewater. Mercury Minimization Plans will be required in the 2020 Columbia Boulevard WWTP permit and in the 2020 NPDES MS4 permit. This position will research toxic characteristics and associated industrial, commercial, and municipal source controls, and will develop monitoring plans, priorities, methodology, and coordinate POTW system-wide monitoring to identify and eliminate sources. It will work internally to develop strategies to encourage commercial and industrial facilities to install source controls and to use less toxic materials.

• A Business Systems Analyst II to provide data management, business process development, and technical support to ECD users and proactively identify and address data and reporting gaps. This position will be responsible for management, maintenance, and upgrades of Environmental Compliance Information Management System (ECIMS). As ECIMS becomes fully functional across all programs there will be a need to consistently evaluate and update program business practices, customize ECIMS for changing business practices, conduct regular QA/QC checks to evaluate data/system errors, and train ECIMS users.

• $100,000 ongoing on-call PTE technical assistance to support newly established and expected future requirements for CBWTP and TCWTP NPDES wastewater discharge permits and associated compliance agreements (e.g. MAO, SEPs), CBWTP air, industrial stormwater, and solid waste permits. This work involves a highly-specialized skill set that would be challenging to develop internally within the timeframe required for delivery.

Program Budget

	FY 2017-18 Actuals	2018-19 Actuals	2019-20 Revised	2020-21 Requested with DP
Bureau Expense				
Capital Outlay	123,381	34,971	228,482	85,000
External Materials and Services	907,206	2,003,217	2,006,102	1,922,937
Internal Materials and Services	587,009	749,197	848,731	58,174
Personnel	5,008,592	5,363,479	6,373,431	239,400
Sum:	**6,626,187**	**8,150,865**	**9,456,746**	**2,305,511**
FTE	51	55	0	0

Resources: Resources for this program come from ratepayer fees and charges for Sewer and Stormwater services. Additionally, this program receives revenue from permit fees and civil penalties for environmental contamination.

Expenses: Expenses for this program include personnel, licenses and permit fees (including penalties), costs for contaminated site evaluation and reporting, Department of Environmental Quality cleanup oversight, staff training, and minor equipment and tools. Capital outlay reflects life-cycle replacement vehicles.

The increases in personal services since FY 2016-17 are attributable to several changes in regulatory program requirements for compliance with City of Portland permits as well as rapid increases in commercial and industrial development requiring review and ongoing regulatory oversight, permitting, inspections, and monitoring by Environmental Compliance staff.

Staffing: 50 positions support this program. Positions include Coordinators (4), Engineers (2), an Environmental Program Coordinator, Environmental Specialists (10), Environmental Supervisors (5), Environmental Technicians (25), a GIS technician III, a Hydrogeologist, and a Manager II.

Staffing totals for FY 2019-20 reflect 6 FTE from the Source Control Plan Review Section moved to the Systems Development Program.

Assets and Liabilities: This program supports Bureau-wide assets of $13.5 billion.

Program Information

Bureau:	Bureau of Environmental Services	**Program Contact:**	Ken Bartocci
Website:	https://www.portlandoregon.gov/bes/	**Contact Phone**	(503) 823-6022

Employee Development

Program Description & Goals

The Employee Development Program is aligned with the strategic goal area of Workforce Development, which involves developing, retaining and attracting highly skilled, diverse and knowledgeable employees that can meet the challenges ahead. This program aims to identify and coordinate training needs and solutions for managers and employees, manages the employee recognition program and supports employee completion of required trainings. The Wastewater Group's Learning and Development work unit is also budgeted within the Employee Development Program.

Measure Title	PM 2017-18 Actuals	PM 2018-19 Actuals	PM 2019-20 Target	PM 2020-21 Target	Strategic Target

Explanation of Services

The Bureau's Strategic Plan identifies Workforce Development as one of six key goal areas. To achieve its strategic outcomes, the Bureau needs a highly engaged and committed workforce. Nearly one-quarter of the Bureau's workforce will be eligible to retire over the next five years. In addition, effective integrated business processes require that employees be trained in current and emerging processes, best practices and technology. Cross training and information sharing, as well as training the new generation of workers, are critical to ensuring the Bureau's long-term success.

Another critical goal is ensuring the safety of our employees and the public. The Employee Development Program works closely with the Bureau's Risk Services Division to develop and update the Bureau's list of required safety trainings. Trainings that are offered to employees are tracked and reported quarterly.

The Wastewater Group's Learning & Development work unit completes assessment and ongoing management of training needs for Wastewater Group staff and related functions. It also provides support for succession planning and employee transition through knowledge capture, skill development and program/work unit orientations, and supports advancement of workforce initiatives that can encourage workforce diversity and career advancement such as trainees, apprentices and interns.

BES has a successful onboarding program (implemented in FY 2017-18) and employee recognition program that help employees understand the Bureau's varied, interconnected areas of work and how employees' work supports our mission. The Bureau's PEER program improves BES culture and empowers employees to address workplace and personal challenges.

Equity Impacts

This program monitors and reports on the BES Equity Plan's participation goal that all employees complete 8 hours of racial equity and workplace diversity training annually, to build their skills and understanding of these issues.

In addition, Bureau-wide efforts are underway to develop improved organizational initiatives and employee development tools to advance career opportunities and encourage a diverse workforce. The Bureau's Equity Managers work closely with the Employee Development program to ensure that equity is reflected in training opportunities, and that workforce development strategies support and advance the goals of the Bureau's Equity Plan.

Changes to Program

For many years, the bureau has attempted to manage training and development in a non-coordinated fashion due to resource limitations. Currently, most bureau activities related to employee development are dispersed throughout various individual program budgets (and not comprehensively reflected under this Program Offer budget). As a result, training and development opportunities for individual staff can be unintentionally inconsistent, missed or unavailable. Recent strategic development efforts (including the BES organizational transition assessment) have clearly identified the critical nature of a more coordinated effort to ensure that training and development opportunities become available to support the entire BES workforce. In FY2020-21, the Bureau is requesting a Bureau-wide training coordinator to better integrate, facilitate and monitor all training throughout the bureau.

As part of the upcoming organizational transition work, the Bureau will be looking to inventory currently disparate training/workforce development activities and assembling a more cohesive strategy for identifying and allocating employee development opportunities, including development of standardized practices and protocols. Effectively managing this effort will be challenged to succeed without a dedicated, full-time subject matter expert.

Future improvements to bureau-wide training and workforce development are likely, given that the Bureau's Strategic Plan emphasizes workforce development as one of the six primary goal areas. Additionally, the City's Bureau of Human Resources' (BHR) new training application for employees has increased the Bureau's responsibilities to enter and track data within the system. The upcoming FY2020-21 Citywide roll out of an employee performance management module will also meaningfully connect current HR administrative functions to training/development opportunities. The Employee Development Program will be working closely with BHR to (1) ensure that BES managers and employees know what trainings are required/available and whether they have been completed, and (2) provide training on how to use the new systems. It is expected that adding the new Coordinator position will allow the bureau to more effectively manage through these collective changes, resulting in more equitable opportunities and improved employee retention and skill development over the long-term.

Program Budget

	FY 2017-18 Actuals	2018-19 Actuals	2019-20 Revised	2020-21 Requested with DP
Bureau Expense				
External Materials and Services	95,280	31,228	37,220	37,220
Internal Materials and Services	273	0	102,636	70,210
Personnel	718,722	1,010,060	116,357	0
Sum:	**814,275**	**1,041,287**	**256,213**	**107,430**

	FTE	0	0	0	0

Resources: Resources for this program come from ratepayer fees and charges for sewer and stormwater services.

Expenses: Expenses for this program include personnel, payment of professional licenses and an internal transfer to the Bureau of Human Resources for the Bureau's share of a professional development fund for the PTE-17 and DCTU unions.

Staffing: 1 Management Analyst supports this program and has been allocated from the Wastewater Services Program.

Assets and Liabilities: This program supports Bureau-wide assets of $13.5 billion.

Program Information

Bureau:	Bureau of Environmental Services	**Program Contact:**	Ken Bartocci
Website:	https://www.portlandoregon.gov/bes/	**Contact Phone**	(503) 823-6022

Watershed Management

Program Description & Goals

The Watershed Management Program develops and implements projects in defined watersheds throughout the City to address stormwater deficiencies, improve water quality and hydrology, mitigate impacts from flooding, protect and restore riparian and shallow water habitat and address sediment contamination. The program leverages support from public and private entities, including grant funding, for watershed projects.

Measure Title	PM 2017-18 Actuals	PM 2018-19 Actuals	PM 2019-20 Target	PM 2020-21 Target	Strategic Target
Feet of streambank restored (not cumulative)	22,311	22,340	12,000	12,000	0
Watershed Health Index for water quality	5.50	5.60	5.90	8.00	0
Number of participants in community events, workshops, stewardship, and restoration events	19,140	27,238	10,000	10,000	10,000

Explanation of Services

The Watershed Management Program collaborates across work groups to implement restoration projects through BES's capital program and other watershed enhancement projects. The program also includes community outreach for stewardship, cultivating partnerships with public and private entities, obtaining grant funding for watershed projects, conducting land use reviews and providing support for environmental permitting. Staff specialize in individual watersheds and become experts in their areas. Watershed Management Program staff members are divided into three teams:

• The Columbia Watersheds Team focuses on the Columbia Slough and areas of the Columbia River watershed that are within the City of Portland. This team coordinates with partners to improve water quality, address sediment contamination and enhance and restore riparian, wetland and shallow-water habitat.

• The Eastside Watersheds Team works to improve the ecological conditions of the Johnson Creek watershed and other watersheds east of the Willamette River, in collaboration with public and private partners. The team leads projects and programs that reduce impacts from flooding, improve surface water quality and hydrologic function and enhance habitat for fish and wildlife.

• The Westside Watersheds Section focuses on sub-watersheds west of the Willamette mainstem, including Fanno and Tryon creeks and tributaries that drain directly to the Willamette and Tualatin rivers. This section works closely with City and other partners to address stormwater system deficiencies, support sanitary system improvements that will improve water quality and protect and restore instream habitat.

Equity Impacts

The projects and activities of the Watershed Management Program provide multiple benefits to communities throughout Portland, and the work is increasingly planned and implemented using an equity lens. Examples include:

• The Community Watershed Stewardship Program coordinates with the City's New Portlander Program to provide partnership outreach activities to immigrant and refugee communities.

• The Columbia Slough Sediment Program coordinates with Community Engagement Liaisons to do outreach about sediment contamination and fish consumption to immigrant and houseless communities who fish in the slough.

• Watershed Management partners with the Johnson Creek and Columbia Slough Watershed Councils, which serve racially diverse and low-income neighborhoods in N, NE and SE Portland.

• Johnson Creek floodplain restoration projects reduce the incidence of nuisance flooding in low-income neighborhoods in SE Portland.

• Neighborhood to the River projects integrate trees, green streets and rain gardens into capital project areas providing opportunities to provide the benefits associated with green infrastructure into historically underserved communities.

• Land acquisition programs protect and restore natural areas in low-income, racially diverse and underserved communities throughout Portland, providing both watershed and public health benefits.

Changes to Program

This program adds a two-year request for $125,000 annually for Hydrology & Hydraulics (H&H) Analysis in the Johnson Creek Watershed. This work will include remapping the Johnson Creek Floodplain to provide better, more accurate and cost-effective tools and protections to people and property in the floodplain. The BES CIP includes nearly $5M in capital funding to do H&H analysis for five projects in the floodplain (currently in design). This additional request will bridge those capital projects with a larger effort to create a new planning level floodplain map. That map could serve as the basis for a federally approved remapping effort for the purposes of the FEMA BiOp (feasibility of offsite balanced cut and fill) and the Lents Collaborative DOC.

The Watershed Management Program also adds $250,000 ongoing for Problem Definition and Scoping Integrated Planning for Stormwater Priority Areas. This request will fund PTE contracts to assist with project planning for priority areas identified by a variety of drivers, including Stormwater System Planning, regulatory requirements and interagency coordination. The bureau's efforts to improve the CIP prioritization and delivery systems will require more integrated planning; it is an essential prerequisite to increased capital project delivery. Current priorities include Upper/Middle Tryon, Kings Heights, Eastside Nuisance Flooding, Willamette River and Columbia Corridor.

An increase of $100,000 is requested for ongoing Technical Support for watershed program implementation, including strategic analysis to inform policy decisions and long-term planning needs, such as impacts to the historic WPA wall and creek-wide mitigation, tri-jurisdictional investment in stormwater infrastructure, and institutional inequity in the Willing Seller program.

Lastly, this program requests a new add of $80,000 annually for Fish Advisory Outreach, in coordination with BES Portland Harbor Superfund Program, which will provide funding for Community Engagement Liaisons (CELs) for targeted outreach to vulnerable populations.

Program Budget

	FY 2017-18 Actuals	2018-19 Actuals	2019-20 Revised	2020-21 Requested with DP
Bureau Expense				
External Materials and Services	447,031	739,284	1,129,306	1,690,306
Internal Materials and Services	321,510	136,713	317,625	450
Personnel	1,814,415	1,721,102	2,105,094	242,452
Sum:	**2,582,956**	**2,597,099**	**3,552,025**	**1,933,208**
FTE	13.87	15.8	0.8	0

Resources: Resources for this program come from ratepayer fees and charges for sewer and stormwater services.

Expenses: The Primary expenses supporting this program include personnel, external costs for watershed plan implementation, Community Stewardship Grants, technical services for risk assessment, residential and business outreach, and Street Trees for the Tabor to River project. Internal services include laboratory and Field Operations for sampling and monitoring for the Columbia Corridor Source Investigations.

Staffing: 15.8 positions support this program with approximately 1.22 FTE allocated to the Capital Program Management and Controls Program for capital improvement projects. Positions include a Coordinator III, Environmental Program Coordinators (3), Environmental Specialists – Generalists (4.8), Environmental Supervisors (3), Environmental Technicians (2), a Manager II, and a Planner.

Assets and Liabilities: This program supports Bureau-wide assets of $13.5 billion.

Program Information

Bureau: Bureau of Environmental Services

Website: https://www.portlandoregon.gov/bes/

Program Contact: Ken Bartocci

Contact Phone (503) 823-6022

Treatment

Program Description & Goals

The Treatment Program (within the Wastewater Group) manages the operation and maintenance of two wastewater treatment plants that treat collected wastewater (sanitary & storm) from the City of Portland service area. The Columbia Boulevard Wastewater Treatment Plant (CBWTP) treats both combined and separated sewers with an annual daily average of 68 million gallons per day of municipal wastewater. The Tryon Creek Wastewater Treatment Plant (TCWTP) treats an annual daily average of 6 million gallons per day. The treatment process at each of the two treatment plants surpasses the performance measure required in the City's National Pollutant Discharge Elimination System permits.

Measure Title	PM 2017-18 Actuals	PM 2018-19 Actuals	PM 2019-20 Target	PM 2020-21 Target	Strategic Target
Amount of wastewater processed annually (in million gallons)	28,901	25,807	29,400	29,200	0
Percentage of biochemical oxygen demand removed	96%	96%	85%	85%	0

Explanation of Services

The Treatment Program plans, manages and performs the operations and maintenance of Portland's two wastewater treatment plants (CBWTP and TCWTP), the combined sewer overflow (CSO) reduction system, and resource recovery of biogas and biosolids.

Operating sewage and stormwater treatment facilities is highly technical work performed in a stringent regulatory environment. Operations requires 24/7 staffing and monitoring, with the ability to quickly adjust staffing levels and treatment processes in response to dramatic changes in weather conditions and flows. Staff monitor treatment process at both CBWTP and TCWTP, troubleshoot issues, and make real-time process adjustments to ensure that regulatory requirements are met. Effective treatment involves coordinated efforts in processing both liquids and solids. It also includes the operation of the CSO reduction system.

Operations and maintenance planning is critical to the Treatment Program to achieve treatment plant permit requirements while performing necessary treatment plant maintenance. This work is scheduled and coordinated between the two disciplines. Maintenance Planning also includes project management and managing vendor/contractor services, as well as asset management functions such as maintaining the asset registry, establishing maintenance procedures, requesting spare parts and managing reference material used to provide reliability-centered operations and maintenance.

The Treatment Program prioritizes resource recovery, utilizing the treatment process to produce beneficial resources such as biosolids and biogas. Approximately 15,000 dry tons (˜ 75,000 wet tons) of biosolids is produced per year at the CBWTP. Biosolids are a nutrient-rich by-product that is beneficially land applied. Biogas is produced from methane and is used to generate energy and fuels. Both biosolids and biogas reuse are required to meet stringent regulations and entail managing, coordinating, measuring, tracking and optimizing the product and associated revenue and expenditures.

Disposal of wastewater and stormwater collection and treatment residuals is another critical aspect of the Treatment Program. Stormwater residuals are delivered from around the City, and inorganic residuals are collected at treatment plants. This generates thousands of tons of material that is managed and disposed of and/or reused in the best manner. Grit & Screenings and Sanitary Collections System residuals are currently hauled and disposed of under BES contracts at the Wasco County Landfill. Additionally, stormwater residuals from sedimentation sumps, catch basins, ditches, culverts and other stormwater facilities are beneficially reused as daily cover at the Wasco County Landfill.

The Treatment Program also manages maintenance of the treatment facilities and related systems, via specialized work units that include the following services:

• Mechanical Maintenance installs, maintains, troubleshoots and repairs mechanical equipment.

• Machining produces cost-effective fabrication of replacement parts and reconditioning of worn or damaged parts.

• Industrial Coatings provides corrosion/weathering protection of exposed surfaces and applies industrial labelling for proper identification of piping/equipment and the warning and/or elimination of hazardous conditions at pump stations.

• Electrical and Instrumentation installs, maintains, troubleshoots and repairs a variety of electrical equipment and instruments and develops and implements automation strategies and control for efficient and effective treatment operations.

Equity Impacts

BES is required by state and federal regulators to ensure the equitable distribution of its basic, sanitary and stormwater services that protect public health and the environment. Treatment services are provided equitably to all communities throughout the City.

Community Advisory Committees, represented by a variety of neighborhood, business, industry, environmental, recreational, educational and other interests, are engaged with both the Columbia Boulevard Wastewater Treatment Plant and Tryon Creek Wastewater Treatment Plant. These are diverse community sounding boards that review and provide input and guidance to ensure that the plants are operated in accordance with the vision of the communities.

Changes to Program

As the treatment plants continue to age, asset failures are becoming more frequent. In recent years, the Treatment Program has supported increased condition assessment work. Better understanding of the condition of all assets at the treatment plants will help prioritize and properly sequence the specific work to minimize unanticipated failures and optimally inform reinvestment needs.

Recent and ongoing program changes include the start-up of the Renewable Compressed Natural Gas (RCNG) facility, which will allow biogas to be sold directly to NW Natural (expected to begin in calendar 2020). The facility will add assets, and therefore increase operational and maintenance costs, which are reflected in the FY2020-21 request. However, revenue generated via RCNG production (projected in excess of $3 million annually) will far exceed the incremental costs. In FY2019-20, the program hired a new FTE specifically to manage the complex RCNG operations as well as other resource recovery efforts.

Three new FTE are requested for this Program in FY2020-21. The first is a Wastewater Operations Specialist who is a technical expert responsible to coordinate treatment plant process changes necessary to support capital construction projects and shut-down of equipment for both planned and emergency (asset failure) maintenance work. This position will also assist with compiling data for regulatory reporting and play a critical role in capturing and memorializing operational strategies and standards. The two additional new positions are Maintenance Supervisors to address excessive span of control issues (currently 21 employees per supervisor) within the existing Plant Mechanical Maintenance and Electrical and Instrumentation work groups.

The FY2020-21 Treatment Program request includes a $100,000 ongoing add for consultant services to evaluate treatment process areas and develop process narratives. This is necessary to effectively manage and maintain the automation system used to control the treatment plants and collection system.

Replacement of end-of-useful-life operational equipment such as hoses used to clean tanks, digesters and other treatment plant assets and new maintenance equipment, such as a deck crane needed to more effectively deliver services – totaling approximately $120,000 – is requested as a one-time add in FY2020-21.

A significant reduction ($3,500,000) to the Treatment Program is possible in FY2020-21 due to the completion of the solids inventory reduction project. This project was necessary due to a portion of the lagoon being unusable because of construction, and the remaining operating cells overloaded with solids. This effort was successful in addressing the solids inventory concerns until the secondary treatment expansion capital project (STEP) provides new solids handling process equipment. However, with a new Solids Management Plan now in place, the program needs additional annual digester cleaning and is requesting an increase of $250,000 ongoing for that purpose.

Additional decreasing changes in FY2020-21 include reductions to overtime, operating supplies, and repair and maintenance supplies. These needs fluctuate annually and will continue to be evaluated and adjusted accordingly each year.

Program Budget

	FY 2017-18 Actuals	2018-19 Actuals	2019-20 Revised	2020-21 Requested with DP
Bureau Expense				
Capital Outlay	48,478	48,852	416,920	75,000
External Materials and Services	7,444,034	14,575,684	14,489,930	11,639,163
Internal Materials and Services	1,016,184	1,224,542	1,026,764	71,278
Personnel	10,683,141	12,159,711	12,022,874	468,636
Fund Expense				
Debt Service	0	0	0	0
Sum:	**19,191,836**	**28,008,789**	**27,956,488**	**12,254,077**
FTE	92.25	97.75	0	0

Resources: Resources for this program come from ratepayer fees and charges for sewer and stormwater services.

Expenses: Primary expenses supporting this program include personnel and external costs for biosolids land application and transportation, digester cleaning services, electricity, odor control, waste disposal, repair and maintenance supplies, treatment chemicals, and other operating supplies and expenses. Internal expenses include Field Operations and laboratory services for Lagoon monitoring.

Staffing: 102 positions support this program with approximately 8.3 FTE allocated to the Capital Program Management and Controls Program for capital improvement projects. Positions include Analysts (2), an Equipment Operator II, Coordinators (4), Electricians (8), Engineers (2), and Industrial Machinist, Industrial Maintenance Millwrights (19), an Industrial Painter, Instrument Technicians (11), a Manager II, Supervisors (7), Wastewater Operations Specialists (4), and Wastewater Operators (41).

Assets and Liabilities: This program supports Bureau-wide assets of $13.5 billion.

Program Information

Bureau: Bureau of Environmental Services

Website: https://www.portlandoregon.gov/bes/

Program Contact: Ken Bartocci

Contact Phone (503) 823-6022